

Description of a new Geckonid Lizard from Maharashtra, India

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(With two plates)

Hemidactylus albofasciatus sp. nov.

Material Examined. Holotype (No. BNHS. 148), adult ♂, in the collections of the Bombay Natural History Society, collected by the junior author in January 1962 at Dorle village, Rajapur Taluka, Ratnagiri District, Maharashtra.

Paratypes, 11 ♀♀, 14 ♂♂, and four hatchlings collected at Dorle village, Rajapur Taluka, Ratnagiri District, Maharashtra, in the months of January 1962, and January 1963; Dabhil village, Taluka and District Ratnagiri, Maharashtra, in January 1963; Gavkhadi village, Rajapur Taluka, Ratnagiri District, in January 1963.

These will be deposited in the collections of the British Museum (Natural History), Bombay Natural History Society, and the Zoological Survey of India, Calcutta.

Diagnosis. Small, slender gecko; scales of the dorsum small, keeled and granular, intermixed with irregularly arranged, enlarged, keeled tubercles. Subdigital lamellae in straight, transverse series; undivided except for the penultimate and two or three more proximal plates which are notched; eight or nine, exceptionally ten (1), lamellar plates under the fourth toe, five under the first toe. Only the distal two or three finger lamellae notched; otherwise the lamellae are entire. Lamellar plates under the fingers number 5, 6, 7, 7, 7, counting from the first to fifth respectively. Usually one pair of post-mentals.



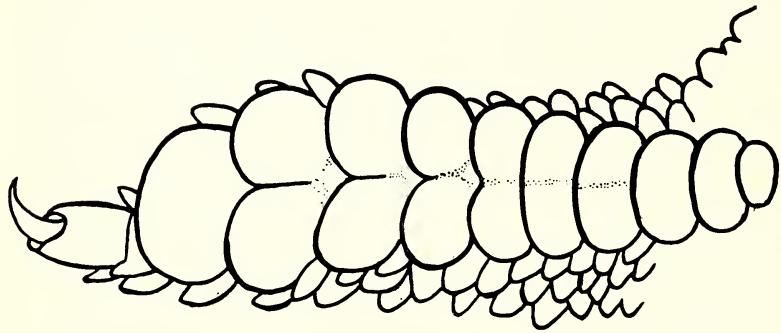
Hemidactylus albofasciatus sp. nov.

(Photo : S. R. Sane)

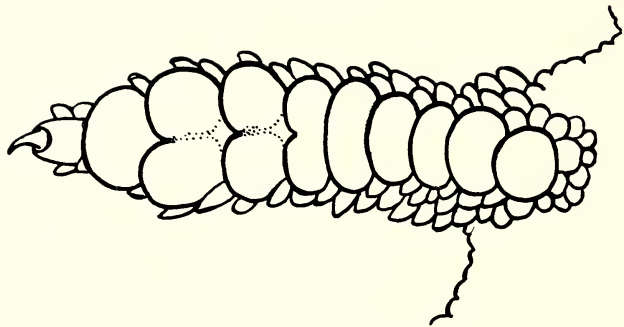


Area of collection at Dorle village, Ratnagiri District, Maharashtra

(Photo : P. W. Soman)



Hemidactylus reticulatus, underside
of the 4th toe of one of the types



Hemidactylus albofasciatus sp. nov.,
underside of the 4th toe

rarely two or three pairs, which may (17) or may not (9) form a suture on the median line. Other chin shields gradually merge in size with the gular scales. Males with seven (1), eight (9), nine (3), or ten (2) preanal pores arranged in a widely angular or almost straight series, uninterrupted mesially. Tail cylindrical, tapering fairly rapidly, with a median furrow; scales of the tail considerably larger than those on the dorsum, faintly keeled or striated, imbricate, arranged in whorls, 28 scales round the third whorl at its posterior edge; a denticulation on each side formed from two to three longitudinal series of enlarged, keeled, pointed but rather flat scales; subcaudals subequal. A conspicuous white band from the nostril to above the ear; dorsum and tail cross-banded with light streaks.

Description of Holotype. Head moderate, snout obtusely pointed, distance from tip of snout to anterior border of eye only very slightly greater than distance from posterior border of eye to anterior border of ear. Diameter of ear $\frac{1}{3}$ th diameter of eye. Eight upper labials, seven lower labials. Mental triangular, its length equal to the width of the first lower labial; one pair of post-mentals, not forming a suture. Rostral $1\frac{1}{2}$ to $1\frac{3}{4}$ times as broad as deep. Nostril between rostral, first labial and three scales, the uppermost separated from its fellow by one internasal. Head covered with small granules, those on the snout keeled and considerably larger than the granular, conical, parietal scales. Back with small, keeled granules, intermixed with larger trihedral tubercles, which are twice as large as the granules. About 80 midbody scales. Tubercles arranged irregularly, separated by one to three granular scales. Belly with smooth, rounded, imbricate scales. Digits free, with little dilation; distal joints rather short; nine lamellae under the fourth toe, the seventh and eighth deeply notched, the remainder without any indentation. Five lamellae under the first toe, the penultimate indented. Adpressed hind limb reaches to the elbow of the adpressed fore limb. A vertebral groove continuing on to the tail where it is more pronounced. Tail round in section, tapering, verticillate, covered above with faintly keeled, pointed imbricate scales; in the middle of each whorl and to either side of the vertebral line are two longitudinal rows of larger, pointed, keeled scales; 28 scales round the tail at the posterior edge of the third whorl. Ventral surface of the tail with subequal, somewhat pointed, smooth, imbricate scales. A slightly curved series of eight preanal scales, not interrupted mesially. Ground colour dark brown; a whitish streak, two scales wide, runs from the nostril, through the eye to above the ear. Ten narrow, somewhat wavy, whitish bands run transversely

from behind the eyes to the hind limbs; interspaces three times the width of a band. Tail similarly cross-banded at each alternate whorl. Ventral surfaces cream with fine brown speckling. A longitudinal, midventral dark line is present on the tail.

<i>Measurements.</i> Snout to Vent	29.6 mm.
Tail	26.5 mm.

Field Notes. The type locality of *H. albofasciatus* is on the open, rocky crests of the hills in the Ratnagiri and Rajapur talukas of Ratnagiri District between 15° 44' to 17° 17' N. and 73° 12' to 72° 52' E., SW. Maharashtra State. Although the crests bear a few patches of scrub, mainly *Carissa carandas* and *Holarrhena antidysenterica*, the surrounding country is jungle of a semi-evergreen nature.

The geckos are nocturnal and by day they remain concealed beneath stones. Many clutches of two eggs were found in January; the eggs measure from 7.5×6.0 mm. to 9.0×7.0 mm.

The livery of the juvenile at birth is dark brown on the dorsum with three darker, longitudinal lines, one on the vertebral region, the other two more lateral and running from the shoulder to the base of the tail. The tail is brick red with narrow, dark lines on the upper surface. The belly is whitish.

Affinities. Allied to *Hemidactylus reticulatus* Beddome, from which it differs mainly in dorsal pholidosis, in the nature of the subdigital lamellae, in tail scalation, and in pattern. In *H. reticulatus* the dorsal tubercles are more numerous and are separated from each other by one (rarely two) scales. A vertebral band, three scales wide, in which no tubercles are developed is present; the scales in this band are smaller than those separating the tubercles. Although Beddome (1870), Boulenger (1885), and Smith (1935) make no mention of there being undivided subdigital lamellae in *H. reticulatus*, in fact the basal five or six lamellae under the fourth toe are without any indentation, although a groove is usually present. The plate adjacent to the terminal scensor is always deeply indented and might almost be thought to be divided; but division is not complete, as is evident when the lamellae are sloughed. Likewise the one or two plates proximal to this one, although the indentation is less developed. Only the greater indentation of the plates and the grooving of the basal ones distinguish the digits of *reticulatus* from those of *albofasciatus*, although there appears also to be more dilation of the distal halves of the digits. The tail denticulation of *reticulatus* is formed from eight (4+4) longitudinal rows of enlarged, keeled,

almost conical scales, as opposed to four (2+2) to six (3+3) rows of keeled, rather flat, pointed scales in the new species. A dorsal, median tail furrow is absent in *reticulatus*. There is also a greater disparity in the size of the dorsal tail scales and the spines in *reticulatus* and the number of scales round the posterior edge of the third whorl is 34-40. The pattern of *reticulatus* is basically, as the name implies, a network. Dark brown lines on a lighter brown background form an open mesh over the head and dorsum. Longitudinal lines from the eye to the ear, or as far as the insertion of the arm are usually pronounced. The dorsal tubercles are usually whitish.

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